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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/672,154	09/27/2000	Masahiko Sato	450100-02733	6619

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FROMMER LAWRENCE & HAUG  
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NEW YORK, NY 10151

EXAMINER

RAMAN, USHA

ART UNIT PAPER NUMBER

2616

DATE MAILED: 12/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/672,154	<b>Applicant(s)</b> SATO, MASAHIKO	
	<b>Examiner</b> Usha Raman	<b>Art Unit</b> 2616	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 24 November 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-4, 6-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED OFFICE ACTION**

***Response to Arguments***

1. Applicant's arguments with respect to claims 1 and 9 have been considered but are moot in view of the new ground(s) of rejection.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-4, and 6-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dunn (US Pat. 5,945,987) in view of Wheeler (US Pre Grant Pub. 2001/0056478).

In regards to claims 1 and 9, Dunn discloses a broadcast program retrieval system for retrieving a desired broadcast program (VOD) among a plurality of broadcast programs. The system comprises a head end with a program information database that maintains program data records containing program IDs (program retrieval identification information) and other program related information, the database having search capability for searching the program information database. Note column 2, lines 54-62, and column 3, lines 19-33. Dunn discloses that the program information records containing program ID sent from the head end are stored locally in the RAM of the user server and that additional information related to the program can be displayed. The user

server is therefore configured to receive and store the broadcast program information sent by head end. The program ID enables the additional information related to the program to be retrieved from the program records locally and allows the user server to select the desired program from among a plurality of program information. Note column 7 lines 57-63, column 9, lines 35-40, and column 11, lines 47-50. The user server is operative to send to the data server a search query comprising a content keyword for searching the broadcast program information for a desired broadcast program (note column 7, lines 20-25) and to receive from the data server results (i.e. program records) search query. Note column 8, lines 48-54, column 9, lines 26-40, and column 12, lines 30-40. Also note column 5, lines 59-64, column 6, lines 1-5, and lines 22-30.

Dunn does not disclose receiving only program ID in response to the query results.

Wheeler discloses an improved search query technique for reducing transmission time and bandwidth, and increasing data access speed. The system comprises contains data that is generally available at the server to be cached at the client memory. When a user establishes a connection with the web server, submitting a query, the server directs the browser to retrieve associated data files associated with the query from the client memory location (i.e. server sends the file identifiers to the browser to direct it to retrieve these files from local cache). Note abstract, paragraph 12 in page 1, paragraph 14 in page 2, paragraphs 23-24, 26-28 in page 2 and paragraph 33 in page 3.

It would have been obvious to one of ordinary skill in the art at the time of the invention, to modify the query processing feature of Dunn with teachings of Wheeler, allowing the server to send only the identifiers of the files associated with the search, for local retrieval of the data at the user server. The motivation is to reduce transmission bandwidth and time, and increase data access speed.

In regards to claim 2, the user server in the modified system is connected to the head end through a communication link (cable network). Note figure 1 in Dunn.

In regards to claim 3, the modified system comprises search criteria including element of the content forming the broadcast program, such as category, title, actor, etc. Note column 7, lines 20-25 in Dunn.

In regards to claim 4, the modified system uniquely identifies each of the broadcast programs by a program ID in the program data record. Therefore the broadcast program inherently has a program ID appended in an "event information region" in order to properly identify the program specified by a program ID. Note column 2, lines 56-59 in Dunn.

In regards to claim 6, the program information sent of by the head end to the user server is used by a plurality of applications running on the set top box including an electronic program guide. Note column 4, lines 1-5 in Dunn.

In regards to claims 8 and 11, the data server of the modified system comprises a "keyword" database where a plurality of keywords related to a program (such as categories, title, actor, etc.) are used to match at least one

content keyword (search criteria) received from the user server. Note column 8, lines 55-67 and column 9, lines 1-7 in Dunn.

In regards to claim 14, the searching functions provided in the modified system has the capability for a viewer to select items from the "viewer list" that contain the programs that have been added by the user and therefore reflecting the user's preference. Note column 10, lines 32-36 and column 9, lines 55-63 of Dunn.

In regards to claim 7 and 10, the modified system does not disclose that the program ID is unique for each of the plurality of broadcasts of the same program. Official notice is taken that program data event in an EPG are uniquely identified by the channel and time (as seen on an EPG grid). It would have been obvious to one of ordinary skill in the art at the time of the invention to further modify the system in order to identify each of the program records by a combination of its channel and time information, thereby allowing each airing of a program event to be uniquely identified, according to its channel and airtime time.

In regards to claim 12, the modified system lacks that the program retrieval system updates the keyword database with any changes made to other information related to the broadcast programs. Official notice is taken that it is well known for head ends often receive schedule update information from a plurality of satellite feeds (downlink feed) and/or other master head end sources. A cable system performing such program schedule updates is further shown by Rector JR. et al. (US Pre Grant Pub 2001/0020298) Therefore changes in the

information related to a program are reflected in updated program information records received from such master head ends. Therefore it would be obvious to one of ordinary skill in the art at the time of the invention to further modify the system with a master head end for providing information reflecting any changes in the broadcast program information, in order to ensure that the local head ends have the most up to date broadcast program information.

In regards to claim 13, the program information record in the modified system includes other information related to the broadcast programs such as cast members (list of performers) appearing on each of the broadcast programs in addition to program ID. Note column 5, lines 56-67 in Dunn.

#### ***Conclusion***


4. The following art made of record and not relied upon is considered pertinent to applicant's disclosure. Lew et al. (US Pre Grant Pub. 2002/0108127) discloses a system employing a low bandwidth communications channel for processing search queries. Data available at server is also cached at the client side. A user submits queries to a server and the server transmits pointers to the user. The pointers are in turn used to access the data from local storage at the user site. The bandwidth is reduced since the server is transmitting only pointers as search query results, which can be done over a low bandwidth communication channel (see abstract).

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Usha Raman whose telephone number is (703) 305-0376. The examiner can normally be reached on Mon-Fri: 9am-6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Faile can be reached on (703) 305-4380. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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12-13-04

  
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